



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

Barnard's variable No. 2 does not appear on any of these plates, nor is it on the spectral plates made with the 100-inch telescope on September 14, 15, and October 1, 1919, which show stars as faint as 13.9, 15.6, and 15.6, respectively.

MARY RITCHIE.

NOTE ON THE PARALLAX OF CEPHEID VARIABLES

In his study of the distances of globular clusters (*Mt. Wilson Contribution*, No. 151) Shapley gives a table comparing the trigonometrically determined parallaxes of six Cepheid variables with values derived from the period-luminosity curve. A revision of the comparison is now possible since a few additions to the material are at hand, and, moreover, Miss Coral Wolfe and the writer have recently determined the systematic errors in the trigonometric parallaxes of different observers. The result of the study of the systematic errors will be published shortly in another place.

The following table gives in successive columns: the number of the star in Boss's *Preliminary General Catalogue*, the parallax observers, the absolute parallax with its probable error, the same values corrected for systematic error, and the parallax as derived by Shapley in *Mt. Wilson Contribution*, No. 153.

Boss Number	Observer	π abs.	p.e.	π Corrected	p.e.	π Shapley
325	Several	$+0''.028$	± 0.015	$+0''.028$	± 0.015	$+0''.016$
637	van Maanen	$+0.010$	5	$+0.009$	5	$+0.004$
1629	Miller, v. Maanen	$+0.026$	15	$+0.022$	12	$+0.004$
1815	Abetti, Miller, Al-leghany	$+0.013$	6	$+0.006$	4	$+0.004$
5071	Mitchell	$+0.004$	9	$+0.003$	9	$+0.005$
X Cygni	Miller	$+0.005$	9	-0.005	9	$+0.001$
5532	Yerkes	-0.011	9	-0.006	9	$+0.018$

The mean of the seven trigonometrical parallaxes is $+0''.011$. After the application of the systematic corrections this mean value reduces to $+0''.008$, in exact agreement with the value derived by Shapley from the period-luminosity curve. A. VAN MAANEN.

THE PARALLAX OF NOVA AQUILAE NO. 3

In these PUBLICATIONS for August, 1919, Sanford and the writer published a preliminary parallax of *Nova Aquilae* No. 3; the result was partly based upon exposures taken on June 12, 1918, which showed images of the nova of 6" diameter, notwithstanding the fact that a double rotary sector had been used. Several better

plates were secured later and the result of the measures of 16 exposures of good quality give as the relative parallax

$$\begin{aligned}\pi &= +0''.019 & \pm 0''.006 \\ \mu_\alpha &= +0''.025 & \pm 0''.012\end{aligned}$$

The absolute parallax is $+0''.021$. Accepting the apparent magnitude at maximum as -1.5 and at minimum $+10.5$ (*Harvard Circular*, No. 208), we find for the absolute magnitude -4.9 and $+7.1$ respectively
A. VAN MAANEN.

A SEVENTEENTH NOVA IN THE ANDROMEDA NEBULA

This object is situated $15''$ east, $150''$ north of the nucleus, and is surrounded by soft nebulosity. It appears on plates taken by Shapley in October, and is invisible on earlier and later plates by Sanford and Shapley.

ESTIMATED MAGNITUDES		
September 21, 1919		invisible
October 15, 1919		invisible
October 16, 1919		invisible
October 30, 1919	15.7	
October 31, 1919	16.5	
November 30, 1919		invisible
December 18, 1919		invisible

No. 17 is nearer the center than any nova found in the *Andromeda* nebula since the discovery of No. 1 in 1885, and in recorded maximum brightness exceeds all but No. 1. The change of magnitude is uncommonly rapid for the descending branch.

MILTON HUMASON.

NEBULAR LINES IN THE EXTREME RED

In a preliminary attempt to explore the near infra-red spectra of the gaseous nebulae, the spectrum of the planetary nebula N.G.C. 7027 has been photographed with plates bathed in dicyanin. Four lines, which appear not to have been previously reported, have been found in the extreme red. Their wave-lengths are approximately 7009, 7065, 7138, and 7325 Å. Of these the second is doubtless due to helium, while the origin of the others is unknown.

The instrumental equipment used in this preliminary work was the 36-inch refractor with a spectrograph carrying a single 60° prism and a camera of 6 inches focal length, ratio F/4. By reason of these optical dimensions the scale of the spectrograms is small, a millimeter being the equivalent of about 600 Å. Under normal